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<120> PT049P1

<130> Serine/Threonine Phosphatase Polynucleotides, Polypeptides, and Antibodies

<140> Unassigned

<141> 2001-08-30

<150> PCT/US01/06256

<151> 2001-02-28

<150> 60/186,350

<151> 2000-03-02

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<170> PatentIn Ver. 2.0

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Arg Tyr Arg Tyr Phe Met Ser Phe Leu Ser
    35                      40

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<400> 17
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Thr	Leu	Ala	Glu	Leu	Asp	Ser	Ser	Glu	Ser	Glu	Glu	Glu	Thr	Leu	His
		35					40					45			
Lys	Ser	Thr	Ser	Ser	Ser	Ser	Val	Ser	Pro	Ser	Phe	Pro	Glu	Glu	Pro
	50					55					60				
Val	Leu	Glu	Ala	Val	Ser	Thr	Arg	Lys	Lys	Pro	Pro	Lys	Phe	Leu	Pro
65					70					75					80
Ile	Ser	Ser	Thr	Pro	Gln	Pro	Glu	Arg	Arg	Gln	Pro	Pro	Gln	Arg	Arg
				85					90					95	
His	Ser	Ile	Glu	Lys	Glu	Thr	Pro	Thr	Asn	Val	Arg	Gln	Phe	Leu	Pro
			100					105					110		
Pro	Ser	Arg	Gln	Ser	Ser	Arg	Ser	Leu	Glu	Glu	Phe	Cys	Tyr	Pro	Val
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Glu	Cys	Leu	Ala	Leu	Thr	Val	Glu	Glu	Val	Met	His	Ile	Arg	Gln	Val
	130					135					140				
Leu	Val	Lys	Ala	Glu	Leu	Glu	Lys	Tyr	Gln	Gln	Tyr	Lys	Asp	Ile	Tyr
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Thr	Ala	Leu	Lys	Lys	Gly	Lys	Leu	Cys	Phe	Cys	Cys	Arg	Thr	Arg	Arg
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Phe	Ser	Phe	Phe	Thr	Trp	Ser	Tyr	Thr	Cys	Gln	Phe	Cys	Lys	Arg	Pro
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Val	Cys	Ser	Gln	Cys	Cys	Lys	Lys	Met	Arg	Leu	Pro	Ser	Lys	Pro	Tyr
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Ser	Thr	Leu	Pro	Ile	Phe	Ser	Leu	Gly	Pro	Ser	Ala	Leu	Gln	Arg	Gly
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225					230					235					240
Leu	Arg	Ser	Ile	Ala	Arg	Phe	Ser	Ser	Lys	Ser	Lys	Ser	Met	Asp	Lys
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Ser	Asp	Glu	Glu	Leu	Gln	Phe	Pro	Lys	Glu	Leu	Met	Glu	Asp	Trp	Ser
			260					265					270		
Thr	Met	Glu	Val	Cys	Val	Asp	Cys	Lys	Lys	Phe	Ile	Ser	Glu	Ile	Ile
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Ser	Ser	Ser	Arg	Arg	Ser	Leu	Val	Leu	Ala	Asn	Lys	Arg	Ala	Arg	Leu
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Lys	Arg	Lys	Thr	Gln	Ser	Phe	Tyr	Met	Ser	Ser	Pro	Gly	Pro	Ser	Glu
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Tyr	Cys	Pro	Ser	Glu	Arg	Thr	Ile	Ser	Glu	Ile					

330

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Gly	Trp	Leu	Met	Glu	Val	Thr	Asp	Ser	Leu	Asp	Arg	Cys	Ile	Gln	Arg	
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Leu	Arg	Glu	Ala	Arg	Lys	Lys	Lys	Glu	Val	Leu	Ser	Leu	Gly	Tyr	His	
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Gly	Asn	Val	Val	Ala	Leu	Trp	Glu	Arg	Leu	Val	His	Glu	Leu	Asp	Thr	
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Thr	Gly	Glu	Cys	Leu	Val	Asp	Leu	Gly	Ser	Asp	Gln	Thr	Ser	Cys	His	
				85					90					95		
Asn	Pro	Phe	Asn	Gly	Gly	Tyr	Tyr	Pro	Val	Gln	Leu	Ser	Phe	Thr	Glu	
			100					105					110			
Ala	Gln	Ser	Leu	Met	Ala	Ser	Asn	Pro	Ala	Val	Phe	Lys	Asp	Leu	Val	
		115					120					125				
Gln	Glu	Ser	Leu	Arg	Arg	Gln	Val	Ser	Ala	Ile	Asn	Arg	Leu	Ala	Glu	
	130					135					140					
Glu	Lys	Phe	Phe	Phe	Trp	Asp	Tyr	Gly	Asn	Ala	Phe	Leu	Leu	Glu	Ala	
145					150					155					160	
Gln	Arg	Ala	Gly	Ala	Asp	Val	Glu	Lys	Lys	Gly	Ala	Gly	Arg	Thr	Glu	
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Phe	Arg	Tyr	Pro	Ser	Tyr	Val	Gln	His	Ile	Met	Gly	Asp	Ile	Phe	Ser	
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Gln	Gly	Phe	Gly	Pro	Phe	Arg	Trp	Val	Cys	Thr	Ser	Gly	Asp	Pro	Gln	
		195					200					205				
Asp	Leu	Ala	Val	Thr	Asp	Glu	Leu	Ala	Thr	Ser	Val	Leu	Glu	Glu	Ala	
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Ile	Ala	Asp	Gly	Val	Lys	Val	Ser	Val	Lys	Leu	Gln	Tyr	Met	Asp	Asn	
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Ile	Arg	Trp	Ile	Arg	Glu	Ala	Ala	Arg	His	Arg	Leu	Val	Val	Gly	Ser	
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<210> 19
<211> 944
<212> PRT
<213> Homo sapiens

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          35          40          45
Gly Leu Asp Ala Thr Pro Gln Asp Gln Ala Val Leu His Arg Asn Arg
  50          55          60
Ala Ala Cys His Leu Lys Leu Glu Asp Tyr Asp Lys Ala Glu Thr Glu
  65          70          75          80
Ala Ser Lys Ala Ile Glu Lys Asp Gly Gly Asp Val Lys Ala Leu Tyr
          85          90          95
Arg Arg Ser Gln Ala Leu Glu Lys Leu Gly Arg Leu Asp Gln Ala Val

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		115					120					125			
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		130					135					140			
Tyr	Met	Ser	Ser	Thr	Asp	Ala	Lys	Val	Glu	Gln	Met	Phe	Gln	Ile	Leu
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Leu	Asp	Pro	Glu	Glu	Lys	Gly	Thr	Glu	Lys	Lys	Gln	Lys	Ala	Ser	Gln
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Asn	Leu	Val	Val	Leu	Ala	Arg	Glu	Asp	Ala	Gly	Ala	Glu	Lys	Ile	Phe
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Arg	Ser	Asn	Gly	Val	Gln	Leu	Leu	Gln	Arg	Leu	Leu	Asp	Met	Gly	Glu
		195					200					205			
Thr	Asp	Leu	Met	Leu	Ala	Ala	Leu	Arg	Thr	Leu	Val	Gly	Ile	Cys	Ser
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225							230					235			240
Arg	Val	Val	Ser	Ile	Leu	Gly	Val	Glu	Ser	Gln	Ala	Val	Ser	Leu	Ala
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Ala	Cys	His	Leu	Leu	Gln	Val	Met	Phe	Asp	Ala	Leu	Lys	Glu	Gly	Val
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Lys	Ala	Val	Pro	Arg	Lys	Ser	Leu	Lys	Asp	Pro	Asn	Asn	Ser	Leu	Thr
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Ser	Leu	Gln	Asp	Pro	Pro	Gly	Glu	Leu	Ala	Val	Thr	Ala	Asn	Ser	Arg
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Met	Ser	Ala	Ser	Ile	Leu	Leu	Ser	Lys	Leu	Phe	Asp	Asp	Leu	Lys	Cys
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Ser	Trp	Phe	Glu	Gly	Gln	Gly	Leu	Ala	Gly	Lys	Leu	Arg	Ala	Ile	Gln
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Leu	Glu	Leu 435	Ser	Gly	Val	Met	Glu 440	Ser	Val	Ile	Ala	Leu 445	Cys	Ala	Ser
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Ala 465	Gly	Lys	Ala	Lys	Arg 470	Ala	Ser	Phe	Ile	Thr 475	Ala	Asn	Gly	Val	Ser 480
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Leu	Val	Asn 595	Cys	Thr	Asn	Ser	Tyr 600	Asp	Tyr	Glu	Glu	Pro 605	Asp	Pro	Lys
Met 610	Val	Glu	Leu	Ala	Lys	Tyr 615	Ala	Lys	Gln	His	Val 620	Pro	Glu	Gln	His
Pro 625	Lys	Asp	Lys	Pro	Ser 630	Phe	Val	Arg	Ala	Arg 635	Val	Lys	Lys	Leu	Leu 640
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Pro	Val	Leu 660	Thr	Ser	Ser	Cys	Arg	Glu 665	Leu	Leu	Ser	Arg	Val 670	Phe	Leu
Ala	Leu 675	Val	Glu	Glu	Val	Glu	Asp 680	Arg	Gly	Thr	Val	Val 685	Ala	Gln	Gly
Gly 690	Gly	Arg	Ala	Leu	Ile	Pro 695	Leu	Ala	Leu	Glu	Gly 700	Thr	Asp	Val	Gly
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<210> 20
<211> 449
<212> PRT
<213> Homo sapiens
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<400> 20
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Arg Met Gly Ile Pro Asn Arg Asn Trp Thr Ile Thr Asp Ala Asn Arg
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Glu	Arg	Val	Pro	Val	Leu	Ser	Tyr	Leu	Tyr	Lys	Glu	Asn	Asn	Ala	Ala
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Ile	Cys	Arg	Cys	Ser	Gln	Pro	Leu	Ser	Gly	Phe	Tyr	Thr	Arg	Cys	Val
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Asp	Asp	Glu	Leu	Leu	Leu	Glu	Ala	Ile	Ser	Gln	Thr	Asn	Pro	Gly	Ser
			100					105					110		
Gln	Phe	Met	Tyr	Val	Val	Asp	Thr	Arg	Pro	Lys	Ile	Trp	His	Phe	Leu
		115					120					125			
Val	Leu	Ile	Met	Arg	Ile	Val	Leu	Gln	Leu	Ala	Lys	Met	Asn	Leu	Met
		130				135					140				
Asp	Ile	Thr	Lys	Ile	Phe	Ser	Leu	Leu	Gln	Pro	Asp	Lys	Glu	Glu	Glu
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Asp	Thr	Asp	Thr	Glu	Glu	Lys	Gln	Ala	Leu	Asn	Gln	Ala	Val	Tyr	Asp
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Asn	Asp	Ser	Tyr	Thr	Leu	Asp	Gln	Leu	Leu	Arg	Gln	Glu	Arg	Tyr	Lys
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Arg	Phe	Ile	Asn	Ser	Arg	Ser	Gly	Trp	Gly	Val	Pro	Gly	Thr	Pro	Leu
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Arg	Leu	Ala	Ala	Ser	Tyr	Gly	His	Leu	Ser	Cys	Leu	Gln	Val	Leu	Leu
		210				215					220				
Ala	His	Gly	Ala	Asp	Val	Asp	Ser	Leu	Asp	Val	Lys	Ala	Gln	Thr	Pro
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Leu	Phe	Thr	Ala	Val	Ser	His	Gly	His	Leu	Asp	Cys	Val	Arg	Val	Leu
				245					250					255	
Leu	Glu	Ala	Gly	Ala	Ser	Pro	Gly	Gly	Ser	Ile	Tyr	Asn	Asn	Cys	Ser
			260					265					270		
Pro	Val	Leu	Thr	Ala	Ala	Arg	Asp	Gly	Ala	Val	Ala	Ile	Leu	Gln	Glu
		275					280					285			
Leu	Leu	Asp	His	Gly	Ala	Glu	Ala	Asn	Val	Lys	Ala	Lys	Leu	Pro	Val
		290				295					300				
Trp	Ala	Ser	Asn	Ile	Ala	Ser	Cys	Ser	Gly	Pro	Leu	Tyr	Leu	Ala	Ala
305					310					315					320
Val	Tyr	Gly	His	Leu	Asp	Cys	Phe	Arg	Leu	Leu	Leu	Leu	His	Gly	Ala
				325					330					335	
Asp	Pro	Asp	Tyr	Asn	Cys	Thr	Asp	Gln	Gly	Leu	Leu	Ala	Arg	Val	Pro

```

<210> 21
<211> 199
<212> PRT
<213> Homo sapiens

<400> 21
Met Trp Val Trp Pro Ser Thr Trp Ala Thr Val Met Gly Ser Pro Lys
  1          5          10
Ala Pro Tyr Leu Gln Ala Ala Ser Val Val Ser Leu Ser Trp Phe Phe
          20          25          30
Thr Phe Gly Val Ala Ile Phe Ser Arg Ser Pro Trp Ala Cys Ser Ala
          35          40          45
Asp Ile Pro Ala Phe Ser Ala Ala Ala Arg Met Leu Cys Gly Ser Val
          50          55          60
Met Ser Ser Phe Trp Glu Glu Glu Lys Thr Ala Gly Arg Arg Cys Gly
  65          70          75          80
Glu Arg Gly Val Thr Gly Arg Thr Val Asp Pro Pro Gly Gly Arg
          85          90          95
Ile Met Thr Leu Lys Thr Cys Leu Gly Lys Val Arg Lys Ser Ser Lys
          100          105          110
Val Leu Pro Glu Asp Ser Gln Ser Pro Thr Leu Thr Leu Asp Gln Thr
          115          120          125
Arg Ile His Ser Ser Arg Asp Ala Phe Ser Ser Ile Ser Gly Cys Ser
          130          135          140

```

```
<210> 22
<211> 141
<212> PRT
<213> Homo sapiens
```

```
<210> 23
<211> 234
<212> PRT
<213> Homo sapiens
```

```

<400> 23
Ala Arg Gly Ile Ile Lys Ile Val His Lys Asn Arg Ala Gln Met Leu
  1             5             10             15
Thr Arg Asp Arg Ala Phe Glu Ser Thr Leu Lys Ser Trp Glu Asp Lys
      20             25             30

```

Gln Lys Cys Asp Ser Gly Lys Pro Val Leu Arg Thr His Leu Tyr Ile
 35 40 45
 His His Ala Ile Asp Leu Ala Thr Glu Glu Val Ser Gln Met Gln Leu
 50 55 60
 Cys Ser Gln Ala Ala Glu Leu Ile Thr Arg Ile Cys Asp Ala Ala
 65 70 75 80
 Thr Ile His Cys Leu Leu Glu Gln Glu Leu Ala His Ala Val Asn Ala
 85 90 95
 Cys Ser His Ala Leu Asn Lys Ala Asn Pro Arg Cys Pro Glu Ser Leu
 100 105 110
 Thr Arg Asp Thr Ala Thr Glu Ile Ala Ile Asn Val Lys Ala Leu Tyr
 115 120 125
 Asn Glu Thr Glu Ser Leu Leu Val Gly Arg Val Pro Leu Gln Leu Glu
 130 135 140
 Ser Pro His Glu Glu Arg Val Ser Asn Ala Leu His Ser Val Glu Val
 145 150 155 160
 Glu Leu Gln Lys Leu Thr Glu Ile Pro Trp Leu Tyr Tyr Ile Leu His
 165 170 175
 Pro Asn Glu Asp Glu Glu Pro Pro Met Asp Cys Thr Lys Arg Asn Asn
 180 185 190
 Arg Ser Thr Val Phe Arg Ile Val Pro Lys Phe Lys Lys Glu Lys Val
 195 200 205
 Gln Lys Gln Lys Thr Ser Ser Gln Pro Gly Ser Gly Asp Thr Glu Ser
 210 215 220
 Gly Ser Cys Glu Ala Asn Ser Pro Gly Asn
 225 230

<210> 24
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 24
 Met Ala Glu Val Glu Glu Thr Leu Lys Arg Leu Gln Ser Gln Lys Gly
 1 5 10 15
 Val Gln Gly Ile Ile Val Val Asn Thr Glu Gly Ile Pro Ile Lys Ser
 20 25 30
 Thr Met Asp Asn Pro Thr Thr Thr Gln Tyr Ala Ser Leu Met His Ser
 35 40 45
 Phe Ile Leu Lys Ala Arg Ser Thr Val Arg Asp Ile Asp Pro Gln Asn
 50 55 60

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Ala Pro Asp Lys Asp Tyr Phe Leu Ile Val Ile Gln Asn Pro Thr Glu
85 90 95

<400> 25
Met Lys Lys Lys Ile Glu Gly Tyr Gln Glu Phe Ser Ala Lys Pro Leu
1 5 10 15

Asn Ser Glu Lys Val Ala Glu Glu Ala Gly Glu Lys Gly Pro Thr Pro
35 40 45

Pro Gly Ala Ser Lys Gln Pro Leu Thr Ser Pro Ser Ala Leu Val Asp
65 70 75 80

Ser Lys Gln Glu Ser Lys Leu Cys Cys Phe Thr Glu Ser Pro Glu Ser
85 90 95

Glu Pro Gln Glu Ala Ser Phe Pro Ser Phe Pro Thr Thr Gln Pro Pro
100 105 110

Leu Ala Asn Gln Asn Glu Thr Glu Asp Asp Lys Leu Pro Ala Met Ala
115 120 125

Asp Tyr Ile Ala Asn Cys Thr Val Lys Val Asp Gln Leu Gly Ser Asp
130 135 140

Asp Ile His Asn Ala Leu Lys Gln Thr Pro Lys Val Leu Val Val Gln
145 150 155 160

Ser Phe Asp Met Phe Lys Asp Lys Asp Leu Thr Gly Pro Met Asn Glu
165 170 175

Asn His Gly Leu Asn Tyr Thr Pro Leu Leu Tyr Ser Arg Gly Asn Pro
180 185 190

Gly Ile Met Ser Pro Leu Ala Lys Lys Lys Leu Leu Ser Gln Val Ser
195 200 205

Gly Ala Ser Leu Ser Ser Ser Tyr Pro Tyr Gly Ser Pro Pro Pro Leu
210 215 220

Figure 1 consists of seven bar charts, labeled (a) through (g), each representing a different demographic variable. Each chart compares the 'Total Sample' (white bars) with the 'Sample with 100% Response Rate' (black bars). The y-axis for all charts represents the percentage of the total sample, ranging from 0 to 100.

- (a) Age:** The x-axis categories are 18-24, 25-34, 35-44, 45-54, 55-64, 65-74, and 75+. The black bars are generally slightly higher than the white bars, indicating a slightly higher proportion of older respondents in the 100% response rate group.
- (b) Sex:** The x-axis categories are Male and Female. The black bars are slightly higher for both Male and Female compared to the white bars.
- (c) Education:** The x-axis categories are Less than High School, High School, Some College, Bachelor's, Master's, and Doctorate. The black bars are slightly higher for 'Less than High School' and 'High School', and slightly lower for 'Bachelor's' and 'Master's' compared to the white bars.
- (d) Employment:** The x-axis categories are Unemployed, Part-time, Full-time, and Retired. The black bars are slightly higher for 'Unemployed' and 'Part-time', and slightly lower for 'Full-time' and 'Retired' compared to the white bars.
- (e) Income:** The x-axis categories are Less than \$10,000, \$10,000-\$19,999, \$20,000-\$29,999, \$30,000-\$39,999, \$40,000-\$49,999, \$50,000-\$59,999, \$60,000-\$69,999, \$70,000-\$79,999, \$80,000-\$89,999, \$90,000-\$99,999, and \$100,000+. The black bars are slightly higher for 'Less than \$10,000' and 'Income' categories, and slightly lower for 'Income' categories.
- (f) Religion:** The x-axis categories are Protestant, Catholic, Jewish, Muslim, and Other. The black bars are slightly higher for 'Protestant' and 'Catholic', and slightly lower for 'Jewish' and 'Muslim' compared to the white bars.
- (g) Marital Status:** The x-axis categories are Single, Married, Divorced, Widowed, and Other. The black bars are slightly higher for 'Single' and 'Married', and slightly lower for 'Divorced' and 'Widowed' compared to the white bars.

Ile 225	Ser	Lys	Lys	Lys	Leu 230	Ile	Ala	Arg	Asp	Asp 235	Leu	Cys	Ser	Ser	Leu 240
Ser	Gln	Thr	His	His 245	Gly	Gln	Ser	Thr	Asp 250	His	Met	Ala	Val	Ser	Arg
Pro	Ser	Val	Ile 260	Gln	His	Val	Gln	Ser	Phe 265	Arg	Ser	Lys	Pro	Ser	Glu
Glu	Arg	Lys 275	Thr	Ile	Asn	Asp	Ile 280	Phe	Lys	His	Glu	Lys 285	Leu	Ser	Arg
Ser	Asp 290	Pro	His	Arg	Cys	Ser 295	Phe	Ser	Lys	His	His 300	Leu	Asn	Pro	Leu
Ala 305	Asp	Ser	Tyr	Val 310	Leu	Lys	Gln	Glu	Ile	Gln 315	Glu	Gly	Lys	Asp	Lys 320
Leu	Leu	Glu	Lys 325	Arg	Ala	Leu	Pro	His	Ser 330	His	Met	Pro	Ser	Phe	Leu
Ala	Asp	Phe	Tyr 340	Ser	Ser	Pro	His	Leu 345	His	Ser	Leu	Tyr	Arg 350	His	Thr
Glu	His 355	His	Leu	His	Asn	Glu	Gln 360	Thr	Ser	Lys	Tyr	Pro 365	Ser	Arg	Asp
Met	Tyr 370	Arg	Glu	Ser	Glu	Asn 375	Ser	Ser	Phe	Pro	Ser 380	His	Arg	His	Gln
Glu 385	Lys	Leu	His	Val 390	Asn	Tyr	Leu	Thr	Ser	Leu 395	His	Leu	Gln	Asp	Lys 400
Lys	Ser	Ala	Ala 405	Ala	Glu	Ala	Pro	Thr	Asp 410	Asp	Gln	Pro	Thr	Asp 415	Leu
Ser	Leu	Pro	Lys 420	Asn	Pro	His	Lys	Pro	Thr	Gly	Lys	Val	Leu 430	Gly	Leu
Ala	His 435	Ser	Thr	Thr	Gly	Pro	Gln 440	Glu	Ser	Lys	Gly	Ile 445	Ser	Gln	Phe
Gln 450	Val	Leu	Gly	Ser	Gln	Ser 455	Arg	Asp	Cys	His	Pro 460	Lys	Ala	Cys	Arg
Val 465	Ser	Pro	Met	Thr	Met 470	Ser	Gly	Pro	Lys	Lys 475	Tyr	Pro	Glu	Ser	Leu
Ser	Arg	Ser	Gly 485	Lys	Pro	His	His	Val	Arg 490	Leu	Glu	Asn	Phe	Arg 495	Lys
Met	Glu	Gly 500	Met	Val	His	Pro	Ile	Leu	His 505	Arg	Lys	Met	Ser 510	Pro	Gln
Asn	Ile 515	Gly	Ala	Ala	Arg	Pro	Ile 520	Lys	Arg	Ser	Leu	Glu 525	Asp	Leu	Asp
Leu	Val	Ile	Ala	Gly	Lys	Lys	Ala	Arg	Ala	Val	Ser	Pro	Leu	Asp	Pro

530 535 540
 Ser Lys Glu Val Ser Gly Lys Glu Lys Ala Ser Glu Gln Glu Ser Glu
 545 550 555 560
 Gly Ser Lys Ala Ala His Gly Gly His Ser Gly Gly Gly Ser Glu Gly
 565 570 575
 His Lys Leu Pro Leu Ser Ser Pro Ile Phe Pro Gly Leu Tyr Ser Gly
 580 585 590
 Ser Leu Cys Asn Ser Gly Leu Asn Ser Arg Leu Pro Ala Gly Tyr Ser
 595 600 605
 His Ser Leu Gln Tyr Leu Lys Asn Gln Thr Val Leu Ser Pro Leu Met
 610 615 620
 Gln Pro Leu Ala Phe His Ser Leu Val Met Gln Arg Gly Ile Phe Thr
 625 630 635 640
 Ser Pro Thr Asn Ser Gln Gln Leu Tyr Arg His Leu Ala Ala Ala Thr
 645 650 655
 Pro Val Gly Ser Ser Tyr Gly Asp Leu Leu His Asn Ser Ile Tyr Pro
 660 665 670
 Leu Ala Ala Ile Asn Pro Gln Ala Ala Phe Pro Ser Ser Gln Leu Ser
 675 680 685
 Ser Val His Pro Ser Thr Lys Leu
 690 695

 <210> 26
 <211> 132
 <212> PRT
 <213> Homo sapiens

 <400> 26
 His Glu Ile Glu His Gly Glu Phe Glu Lys Asn Leu Tyr Gly Thr Ser
 1 5 10 15
 Ile Asp Ser Val Arg Gln Val Ile Asn Ser Gly Lys Ile Cys Leu Leu
 20 25 30
 Ser Leu Arg Thr Gln Ser Leu Lys Thr Leu Arg Asn Ser Asp Leu Lys
 35 40 45
 Pro Tyr Ile Ile Phe Ile Ala Pro Pro Ser Gln Glu Arg Leu Arg Ala
 50 55 60
 Leu Leu Ala Lys Glu Gly Lys Asn Pro Lys Pro Glu Glu Leu Arg Glu
 65 70 75 80
 Ile Ile Glu Lys Thr Arg Glu Met Glu Gln Asn Asn Gly His Tyr Phe
 85 90 95
 Asp Thr Ala Ile Val Asn Ser Asp Leu Asp Lys Ala Tyr Gln Glu Leu

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100 105 110

Leu Arg Leu Ile Asn Lys Leu Asp Thr Glu Pro Gln Trp Val Pro Ser
 115 120 125

Thr Trp Leu Arg
 130

<210> 27
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 27
 Met Leu Ser Ser Gly Thr Val Gly Lys Arg Gln Asn Asn Ser Gln Phe
 1 5 10 15

Gln Val Pro Lys Met Pro Trp Lys Ala Ser Val Glu Gly Thr Arg Thr
 20 25 30

Asn His Pro Ala Lys Ile Pro Ala Gly Ser Ser Ser Ala Leu Gly Ser
 35 40 45

Trp Arg His Asp Gly Leu Leu Gln Glu His Thr Glu Lys Ser Thr Gln
 50 55 60

Lys Gly Tyr Phe Gly Glu Ala Val Trp Thr Leu Arg Cys Thr Ala Glu
 65 70 75 80

Gly Glu Leu Gly Asn Pro Arg Pro Glu Val Ser Ile Gly Tyr Phe
 85 90 95

<210> 28
 <211> 558
 <212> PRT
 <213> Homo sapiens

<400> 28
 Met Tyr Ser Pro Ile Ile Tyr Gln Ala Leu Cys Glu His Val Gln Thr
 1 5 10 15

Gln Met Ser Leu Met Asn Asp Leu Thr Ser Lys Asn Ile Pro Asn Gly
 20 25 30

Ile Pro Ala Val Pro Cys His Ala Pro Ser His Ser Glu Ser Gln Ala
 35 40 45

Thr Pro His Ser Ser Tyr Gly Leu Cys Thr Ser Thr Pro Val Trp Ser
 50 55 60

Leu Gln Arg Pro Pro Cys Pro Pro Lys Val His Ser Glu Val Gln Thr
 65 70 75 80

Asp Gly Asn Ser Gln Phe Ala Ser Gln Gly Lys Thr Val Ser Ala Thr
 85 90 95

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Cys	Thr	Asp	Val 100	Leu	Arg	Asn	Ser	Phe 105	Asn	Thr	Ser	Pro	Gly 110	Val	Pro
Cys	Ser	Leu 115	Pro	Lys	Thr	Asp	Ile 120	Ser	Ala	Ile	Pro	Thr 125	Leu	Gln	Gln
Leu	Gly 130	Leu	Val	Asn	Gly	Ile 135	Leu	Pro	Gln	Gln	Gly 140	Ile	His	Lys	Glu
Thr 145	Asp	Leu	Leu	Lys	Cys 150	Ile	Gln	Thr	Tyr	Leu 155	Ser	Leu	Phe	Arg	Ser 160
His	Gly	Lys	Glu	Thr 165	His	Leu	Asp	Ser	Gln 170	Thr	His	Arg	Ser	Pro 175	Thr
Gln	Ser	Gln	Pro 180	Ala	Phe	Leu	Ala	Thr 185	Asn	Glu	Glu	Lys	Cys 190	Ala	Arg
Glu	Gln	Ile 195	Arg	Glu	Ala	Thr	Ser 200	Glu	Arg	Lys	Asp	Leu 205	Asn	Ile	His
Val 210	Arg	Asp	Thr	Lys	Thr	Val 215	Lys	Asp	Val	Gln	Lys 220	Ala	Lys	Asn	Val
Asn 225	Lys	Thr	Ala	Glu	Lys 230	Val	Arg	Ile	Ile	Lys 235	Tyr	Leu	Leu	Gly	Glu 240
Leu	Lys	Ala	Leu	Val 245	Ala	Glu	Gln	Glu	Asp 250	Ser	Glu	Ile	Gln	Arg	Leu 255
Ile	Thr	Glu	Met 260	Glu	Ala	Cys	Ile	Ser 265	Val	Leu	Pro	Thr 270	Val	Ser	Gly
Asn	Thr	Asp 275	Ile	Gln	Val	Glu	Ile 280	Ala	Leu	Ala	Met	Gln 285	Pro	Leu	Arg
Ser 290	Glu	Asn	Ala	Gln	Leu	Arg 295	Arg	Gln	Leu	Arg	Ile 300	Leu	Asn	Gln	Gln
Leu 305	Arg	Glu	Gln	Gln	Lys 310	Thr	Gln	Lys	Pro	Ser 315	Gly	Ala	Val	Asp	Cys 320
Asn	Leu	Glu	Leu	Phe 325	Ser	Leu	Gln	Ser	Leu 330	Asn	Met	Ser	Leu	Gln 335	Asn
Gln	Leu	Glu	Glu 340	Ser	Leu	Lys	Ser	Gln 345	Glu	Leu	Leu	Gln	Ser 350	Lys	Asn
Glu	Glu 355	Leu	Leu	Lys	Val	Ile 360	Glu	Asn	Gln	Lys	Asp	Glu 365	Asn	Lys	Lys
Phe 370	Ser	Ser	Ile	Phe	Lys	Asp 375	Lys	Asp	Gln	Thr	Ile 380	Leu	Glu	Asn	Lys
Gln 385	Gln	Tyr	Asp	Ile	Glu 390	Ile	Thr	Arg	Ile	Lys 395	Ile	Glu	Leu	Glu	Glu 400
Ala	Leu	Val	Asn	Val	Lys	Ser	Ser	Gln	Phe	Lys	Leu	Glu	Thr	Ala	Glu

415

Gln Leu Asp Arg
50